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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,158	12/01/2003	Hassan E. El-Shall	5853-479	1777

39448 7590 06/02/2004  
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EXAMINER

HRUSKOC, PETER A

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 10/725,158	Applicant(s) EL-SHALL ET AL.
Examiner Peter A. Hruskoci	Art Unit 1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-852)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/54400 El Shall in view of Kopyleva et al. 5,824,132. El Shall disclose (see pages 3 and 9-11) a method of treating spent alkaline pulping liquor substantially as claimed. The claims differ from El Shall by reciting that the phosphoric acid is generated by acidulating a phosphate containing material. Kopyleva et al. disclose (see col. 1 line 15 through col. 3 line 65) that it is known in the art to generate phosphoric acid by treating phosphate rock with sulfuric acid. It would have been obvious to one skilled in the art to modify the method of El Shall by utilizing the recited acidulating step in view of the teachings of Kopyleva et al., to aid in generating phosphoric acid for treating the black liquor. With regard to claim 13, it is submitted that the solid products produced from the use of the phosphoric acid of Kopyleva et al. in the method of El Shall are considered patentably indistinguishable from the solid products recited in the instant claims.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/54400 El Shall in view of Kopyleva et al. 5,824,132 as above, and further in view of Kurple 5,034,094. The claims differ from the references as applied above by reciting a step of causticizing the clarified liquor with calcium oxide. Kurple disclose (see col. 2 line 1 through col. 4 line 60) that it is known in the art to add calcium oxide to a residual black liquor solution that has been treated with phosphoric acid, to aid in precipitating calcium phosphate from the

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solution. It would have been obvious to one skilled in the art to modify the references as applied above by utilizing the recited causticizing step in view of the teachings of Kurple, to aid in precipitating calcium phosphate from the black liquor. The specific calcium phosphate precipitated would have been an obvious matter of process optimization to one skilled in the art, depending on the specific black liquor treated and results desired, absent a sufficient showing of unexpected results.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Peter A. Hruskoci  
Primary Examiner  
Art Unit 1724

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5/29/04